

Salazar, M.H.; Ocampo, J.A.; Restrepo, M.T.; **Coppens d'Eeckenbrugge, Geo**;
Caetano, C.M.; Jarvis, A.; Villegas, A.M.

**First results from diversity mapping of *Passiflora* (Passifloraceae) and
Vasconcellea (Caricaceae) in the Colombian coffee growing zone**

CIRAD, France, coppens@cirad.fr

Poster session 10, Monitoring biodiversity changes

The Colombian coffee-growing zone is one of the eco-climatic areas undergoing major impact of human activities in Colombia. It roughly corresponds to the 1000-2000 m altitudinal range along the Cordilleras, where agriculture is principally based on growing of coffee, plantain and fruits (mainly citrics), and raising cattle. Large and middle-sized towns have grown steadily in the last decades, imposing new pressures on rural lands (e.g. river basin management for water supply, recreational activities), with negative but also potentially positive effects, such as the new conservation demand and the concomitant development of agro-ecotourism. With the general objective of providing scientific bases for environmental managers at the local and national levels, a study of the distribution of biodiversity was undertaken using as indicators two genera that show particular richness at medium to high altitudes: *Passiflora* (passion fruits) and *Vasconcellea* (mountain papayas). Geographical records were gathered for 3780 samples from herbaria, genebanks or the field, for 154 *Passiflora* and 10 *Vasconcellea* species. The DIVA-GIS and FloraMap software packages were used to produce maps of observed diversity and potential range of each species. Both genera show an altitudinal variation of their diversity, with a peak at intermediate elevations. Potential diversity is highest along the Cordillera Central, in the central coffee zone, and between the Cauca and Huila departments. Other hotspots appear in Antioquia, Tolima, Nariño, and the center of Cauca and Cundinamarca departments. With the exceptions of the central coffee zone, these hotspots have been poorly explored by botanists. The overlap between *Passiflora* and *Vasconcellea* hotspots underlines the consistency of these first results and constitutes a first validation of our choice of these two important taxa.

Keywords: *Passiflora*, *Vasconcellea*, Colombia, species distribution, biodiversity